For Research Use Only

B23/NPM1 Recombinant antibody

Catalog Number:82030-1-RR Featured Product

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Antibodies | ELISA kits | Proteins
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Basic Information

Catalog Number:
82030-1-RR

Size:
1000 ug/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG0286

GenBank Accession Number:
BC002398

GeneID (NCBI):
4869

UNIPROT ID:
P06748

Full Name:
nucleophosmin (nucleolar phosphoprotein B23, numatrin)

Calculated MW:
33 kDa

Observed MW:
38 kDa

Purification Method:
Protein A purification

CloneNo.:
1G4

Recommended Dilutions:
WB 1:5000-1:50000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:1000-1:8000
IF/ICC 1:500-1:2000

Applications

Tested Applications:
WB, IHC, IF/ICC, IP, ELISA

Species Specificity:
human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : HEK-293 cells, HeLa cells, Jurkat cells, THP-1 cells

IP : Jurkat cells,

IHC : human prostate cancer tissue, human normal colon

IF/ICC : HeLa cells,

Background Information

Nucleophosmin (NPM1,B23) is a putative ribosome assembly factor with a high affinity for peptides containing nuclear localization signals (NLSs). The transport of proteins across the nuclear envelope is a selective, multistep process involving several cytoplasmic factors. Proteins must be recognized as import substrates, dock at the nuclear pore complex and translocate across the nuclear envelope in an ATP-dependent fashion. Several cytosolic and nuclear proteins that are central to this process have been identified. The 38 kDa nuclear protein nucleophosmin is involved in ribosomal assembly and rRNA transport. It is an abundant protein that is highly phosphorylated by Cdc2 kinase during mitosis.

Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
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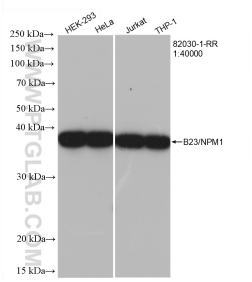
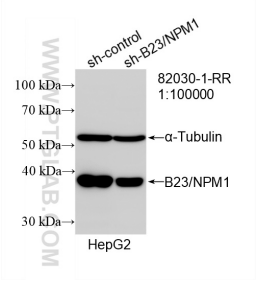
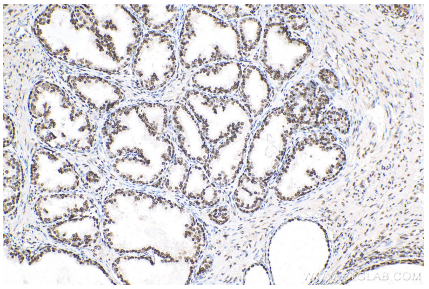
Selected Validation Data



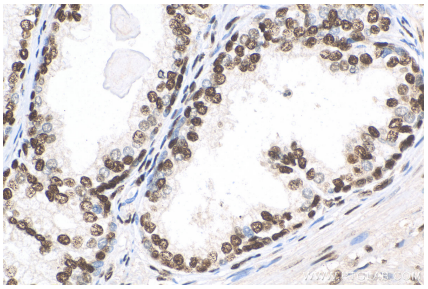
Various lysates were subjected to SDS PAGE followed by western blot with 82030-1-RR (B23 antibody) at dilution of 1:40000 incubated at room temperature for 1.5 hours.



WB result of B23/NPM1 antibody (82030-1-RR; 1:100000; incubated at room temperature for 1.5 hours) with sh-Control and sh-B23/NPM1 transfected HepG2 cells.

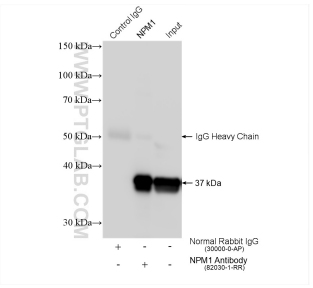


Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 82030-1-RR (B23/NPM1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

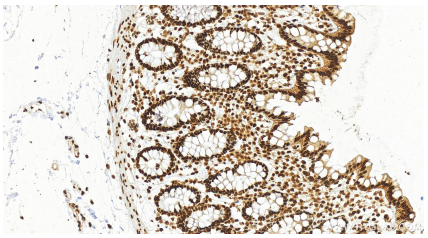


Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 82030-1-RR (B23/NPM1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

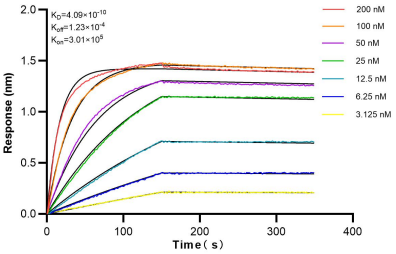
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using B23 antibody (82030-1-RR, Clone: 1G4) at dilution of 1:1000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



IP result of anti-B23/NPM1 (IP:82030-1-RR, 4ug; Detection:82030-1-RR 1:8000) with Jurkat cells lysate 1560 ug.



Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 82030-1-RR (B23/NPM1 antibody) at dilution of 1:8000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 82030-1-RR against Human B23/NPM1 were performed. The affinity constant is 0.409 nM.